

1989

Dudelsacks : sculptural extensions in blown glass

Cristine C. Corcoran
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AN ABSTRACT OF THE THESIS OF Cristine C. Corcoran for the Master of Fine Arts in Sculpture presented May 5, 1989.

Title: DUDELSACKS: SCULPTURAL EXTENSIONS IN BLOWN GLASS

APPROVED BY THE MEMBERS OF THE THESIS COMMITTEE:



Michiro Kosuge, Chairman



James Hansen



Richard Muller



Mary Constans



Rita R. Vistica

This thesis project consists of 19 sculptures. The medium is hot blown glass. The work interprets and extends the visual and metaphorical qualities of bagpipes. The utilization of the German *dudelsack* references the playful improvisational nature of these international and culturally diverse forms.

Three basic phases are evidenced in this sculptural work. Phase I consists

of clear glass and sandblasted sculptures. Transparency is utilized in these pieces to explore and enhance the spatial relationships between the bag and the attached drones and chanters. Phase II consists of simplified colored and manipulated glass abstractions of the bagpipe form. In Phase III, colored glass and various hot and cold techniques are employed to create textural statements often referencing the plaids, furs, and other ornamental materials found in traditional bagpipes.

DUDELSACKS: SCULPTURAL EXTENSIONS IN BLOWN GLASS

by

CRISTINE C. CORCORAN

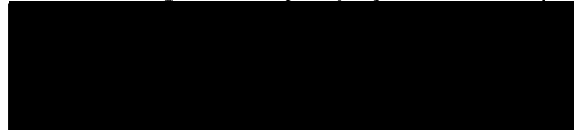
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requirements for the degree of

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in
SCULPTURE

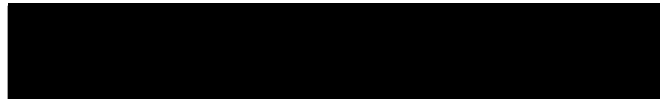
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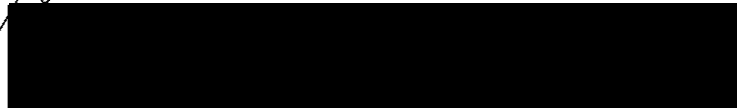
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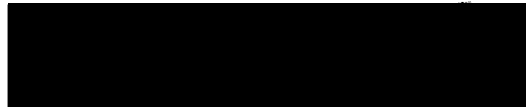
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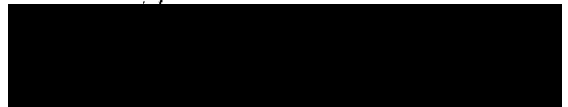
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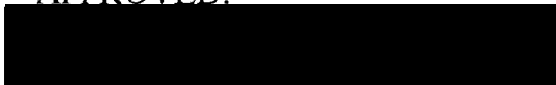


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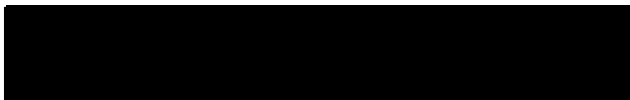


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With a full heart and the deepest gratitude, I dedicate this work to my parents, Ed and Helen, and to Dr. Ann L. Sherman, without whose support and constant encouragement this work would not have come to fruition.

Additionally, I want to thank my committee members, Robert Kasal and friends at Portland State University. To Dr. Robert Fritz, I offer the gesture of my work, in thanks for the gesture of his work.

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CHAPTER I

INTRODUCTION

PURPOSE/METAPHORIC BASE

This thesis work consists of a series of sculptural forms in hot blown glass utilizing the expressive potential of the bagpipe. In particular, the relationships between the cylindric appendages, and organic sack or bag elements of the bagpipes are explored.

Blown glass sculptures frequently do not seem to embody or reflect the fluidity and movement of the process. The malleable liquid glass continually changing and emerging into an organic form while hot, becomes a hard, cold mass encapsulating only one final moment of an entire process. As a result, the final symmetry of the frozen glass pieces do not reflect the plastic qualities of the working material. The shape of bagpipes, being both geometric and organic in shape, allowed me to emphasize the contrasting liquidity and rigidity of this seductive material. My quest was to bridge the gap between the process and the final form.

Initially, the topic simply intrigued me because the cultural reference is so varied and universal. For example, over eighty different bagpipes are known by name.¹ Each bagpipe has its own configuration and, by utilizing the inherent qualities of the bagpipe, it became the inspiration for metaphoric content and

abstraction in my glass work.

As I researched this topic, I found that the physical form of bagpipes far extended my limited perception. All have a bag or sack to contain air and a variety of drones, chanters and bellows which extend off the bag to produce and convey the sound. My abstracted interpretation of bagpipes was greatly inspired by the immense variety of ornament, size, shape and use of exotic materials differing among cultures.

As the work developed, I found that the form of 'bagpipe' and the process of glass blowing were metaphorically connected in ways I had not anticipated. Both involve the expelling of the lungs and the body to produce a desired result. One produces a sound, the other a visible form which, of necessity, is always initially a bubble, hence bag. I found that my attention often shifted between the bagpipe as an object and the function of the bagpipe as a vehicle of expression. Just as I often recognize that my attention and direction as I work in hot glass shifts from the fluid making process to the final, visual result of that process. One is consumed by the liquid, molten glass being shaped by the elements of the fire, gravity and the cooling process only to remember that the process of 'making' paradoxically creates something tangible as a result. So too, I found myself simultaneously interested in the actual form of the bagpipe, its existence in space, and the inter-relationship of its parts within that occupied space to that of the silence or the voice of this interpreted instrument.

The molten fluidity of the blowing process allows me to capture the billowing essence of the sack forms which are actually brittle. In direct contrast, the cylinders embody the control element in glass blowing. Together they reference the tension and balance between control and improvisation which is central to glass blowing and the musical process.

This supportive statement, in conjunction with my thesis show will outline the historical and individual influences and discuss the metaphorical implications of the work. The sculptural pieces are grouped into three phases for analysis and discussion. Each phase represents a developmental period with specific sculptural attributes.

CHAPTER II

INFLUENCES

HISTORICAL

It was expanding to discover that most old world cultures have a bagpipe, all uniquely tailored to their origin. The types and formations of bagpipes extend beyond those of my Scottish grandfather or the cultural stereotypes attributed to the Irish and Scottish cultures.

The nomadic shepherds in many cultures merely strapped local wooden reeds to the gut of an animal such as a goat or sheep, producing a crude but functional instrument. The Italian *zampogna* and the simple reed and skin bagpipe of India, both peasant instruments, remain basically unchanged from their early days of invention. The history of bagpipes is so old that no country can actually claim the invention of this melodic instrument as their sole discovery.

Some bagpipes are extremely ornate and are much smaller than others. This development occurred when cultures adapted the folk instrument for use indoors. The most elegant of the smaller bagpipes were the French *musettes* which were lavishly embellished with silks, ivory, ebony, precious metals and embroidery for use among French court and high society during the 16th and 17th centuries.

Other than the commonly seen Scottish Highland pipes, which were initially used as battle instruments, the category of bagpipes that most heavily influenced my work consists of those used in Germanic and Eastern European countries such as Rumania, Poland, Hungary, and Czechoslovakia. These bagpipes have wonderfully lyrical names and dramatically ornamented bags and extensions. There are two types: mouth-blown and bellows-blown versions. In particular, I was drawn to the use of organic material as part of the ornamentation and structure. Elements such as fur-covered bags, carved goats heads, and bells made of cowhorn and brass lent an exotic and multidimensional element to the pipes. These bagpipes, referred to as Bohemian *dudys* or German *dudelsacks*, were often constructed of right-angled drones which tapered down to a bell. In addition to the numerous variety of these bagpipes, the name 'dudelsack' seems to aptly define my constructions. I wanted to allow the lyricism of that word to become the basis for my abstraction rather than attaching a literal rendering of 'bagpipe' to the work.

In summary, historical research into the forms and functions of bagpipes has provided me with a basis for interpreting the qualities of the actual physical objects. From that, I was able to create new, personal works that reflect the internalization of the essence of various culturally referenced bagpipe forms combined with the metaphorical relationships created during the working process.

INDIVIDUALS

Glass, as a studio art form, is so new that the historical reference has been that of vessel production both in the old European tradition and in the West. Until 1962, glass artists worked as teams, and sculptural forms were limited to solid mass pieces. In the past twenty-five years, glass has witnessed a new and exciting breakthrough technically and visually.

I would like to briefly acknowledge the importance of the glassworkers of the turn of the century. In response to the lost importance of craft and of the individual, post-industrial revolution glassworkers set the stage for the modern resurgence in glass as an art form. The inspiration for the advancement of modern glass lies in the attitude of the glassworkers of the early 1900's. In particular, Emile Galle of France, who in turn inspired Louis Tiffany, promoted and escalated what has been termed the 'Art Nouveau' period in glass. Both men felt the expression of their work was of greater significance than the mass production of the modern factory-produced glass. Their emphasis was that glass was a material which could be used to express and challenge their concerns. They viewed it as another art medium, not strictly a material for utilitarian production. Others who were highly motivated by and concerned with the aesthetic of glass during the same time period include the Daum brothers of France, Fredrick Carder of the United States, and Lalique of France.

Four major contemporary glass artists have influenced my work. They are: Harvey Littleton, founder of the studio art glass movement; Dale Chihuly,

founder of Pilchuck International School of Glass; Fritz Dreisbach of Penland School of Crafts; and Marvin Lipofsky of the California College of Arts and Crafts. Glass forming is so immediate and ever changing that a predictable, calculated result can quickly be altered into an experiment of visual surprise or tragedy. The ability to alter glass and allow the process of fire and gravity to affect a henceforth unforeseen result means trusting one's intuition and skills enough to allow the flow of the material to inform and enrich the result. This ability can graphically be seen in all four of these artists' work.

Harvey Littleton is the first and foremost influence on my work and that of all contemporary glass artists. I am now a product of the first generation of teachers who have all been directly influenced by Littleton. The spontaneous and animated combinations of Chihuly, the anthropomorphic forms of Lipofsky and the fluidity of mass and color of Dreisbach, all directly descend from the experimentation and accomplishment of Littleton. In Figures 1 through 4, a work of each artist is illustrated. Littleton's influence is great. The movement is young and he has continued to grow with the material, experimenting continually over the past 25 years. The predominant characteristic in all four of these glass artists' works which has influenced my own work is their "attempt to get at the essence of [the] material"². All four artists mastered control of the material through the production of utilitarian objects and eventually found their expression through a disregard for function. In my work I have often thought about how to make the inside become the outside, as Lipofsky so aptly does

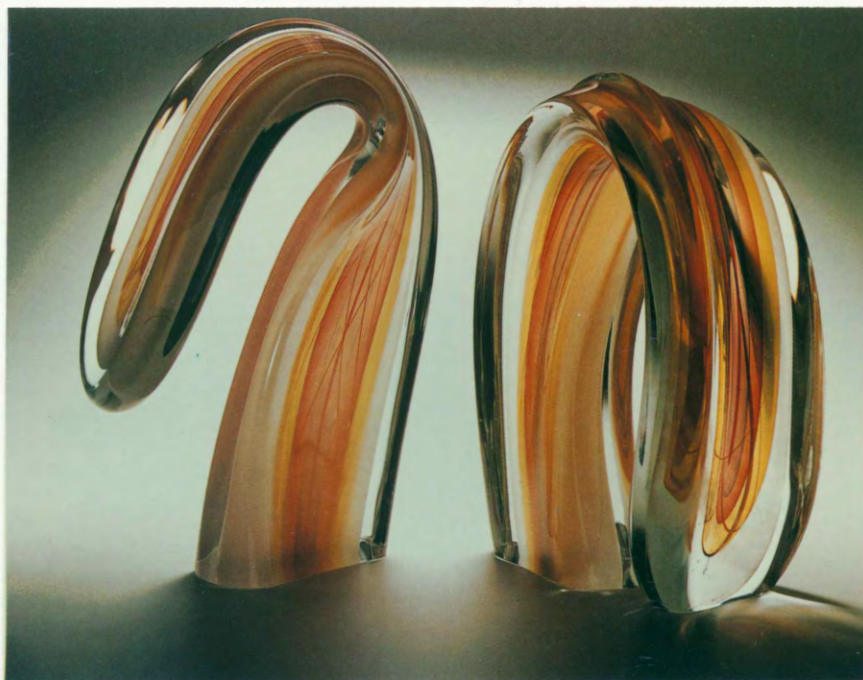


Figure 1. Harvey Littleton, sculpture. Source: Paul J. Smith, 1986, page 92.



Figure 2. Dale Chihuly, sculpture. Source:
Paul J. Smith, 1986, page 95.



Figure 3. Fritz Dreisbach, *California Champagnes*.
Source: Paul J. Smith, 1986, page 185.



Figure 4. Marvin Lipofsky, sculpture.
Source: David J. Wagner, 1984, page 85.

through the use of cavitated, biomorphic sculptures. My sandblasted, open forms are a reflection of Lipofsky's technique. However, I feel strongly the need to extend the dynamic glass constructions into a space beyond the amoebic bag configuration. The influence of Chihuly's work is indirect. It is difficult not to gravitate toward the emotional impact of Chihuly's coloration and volume contained within his sculptural assemblages. In looking at his work, listening to him and reading about his work it became clear to me that his surface treatment and color choice were based on tangible points of reference. He has always referenced his work and decisions to the objects of his inspiration, i.e., Navajo weavings, sea forms, shells, and flowers. Chihuly's experimentation with glass interpretations of texture inspired me to further explore this area.

Dreisbach's work remains one of my favorite bodies of work, even as the years progress. He, along with Lipofsky and Chihuly, was an early Littleton protégé. The element of continual surprise coupled with exquisite mastery of technical skill evident in his work continually inspires me. Dreisbach utilizes techniques of layering color upon color, not unlike Chihuly, but with different results. His forms are massive volumes of glass layers which allow the transparency and optic quality of clear glass to be evidenced. I am intrigued by this use of clear glass and it challenges me to think about the depth of color penetration through the surface of my pieces, as well as the interaction between opacity and transparency and the resultant properties therein.

CHAPTER III

PROCESS

In order to provide the reader with a more complete understanding of the process I utilized in my thesis work, I have included this section. Hot blown glass is considerably unlike any other material, even though other fire arts, such as metal, ceramics, and even other glass arts, have something in common with blown glass. Harvey Littleton describes it in this way:

[the artist] must see it [the material] hot on the end of his pipe as it emerges glowing from the furnace; he must have a sense of wonder! His perceptions are ever new; his reactions must be swift and decisive! He must immerse himself in immediate experimentation and study, for the glass will not wait.

In glass blowing, if the necessary risk is taken, the outcome must always be in doubt. Artistic creation must occur in crisis,...this principle is fundamental in the training of the glass artist.³

I have worked in other three dimensional mediums and have never been as continuously and seductively attracted to anything as hot glass. The quest of my work has been to develop a subject matter, (i.e. bagpipes), while exploring the interaction between me and the material. My goal has been to encapsulate my emotional and intellectual responses and choices into visual ideas that communicate those experiences to others.

Complex glassworking techniques were often employed and new processes were developed as needed to express my feelings about the subject matter. I

stroved to create an inter-relationship between the bag and drones, while contrasting the biomorphic, organic qualities of the bag to the geometric hard-edge extensions. My developmental process began with the technique of blowing two separate forms and attaching them together while they were still hot. Then, hoping for an uncracked final piece, I would slowly allow them to cool into a solid component. This was challenging and some succeeded while numerous attempts failed, both physically and visually. It quickly became apparent that this method, while expedient and practical as a working method, was extremely limiting in terms of the final manipulation of the forms. Consequently, I chose to make some of the pieces hot in this manner, while simultaneously beginning to make single components which could be attached later in the cold state.

This resolution allowed me to return to the pieces and make rational and aesthetic decisions based on space and color relationships. This meant many hours spent in research and trial, not only with the components, but also with adhesives. Ultimately, I resolved this problem with a state-of-the-art adhesive and became elated with the new found freedom to attach elements exactly as I wanted. Utilizing a grinding and polishing system, I was also able to grind away unwanted elements, and finalize the forms by polishing and adhering the joints.

Texture and the surface manipulation of three-dimensional forms has always intrigued me. I am compelled by it without really being conscious of it during the working process. It became apparent to me after having spent the

initial first half of my thesis work in clear glass that I strove to describe the form continually in terms of texture. The use of texture in glass usually evolves out of a willingness to experiment with tools and the addition of small bits of glass, that one then manipulates with various techniques. I felt that the evolutionary step in these pieces would be to try to manipulate the color in a way that, in itself, would imply or become textural. The consequence of this is that some of my colored pieces definitively allude to textural expression and some hover in a transitional mid-ground. Always, my use of color was to try to incorporate it with the form. Technically, this involves manipulating hot glass in very tenuous and unpredictable ways. Wherever there is an addition or any type of overlapping of coloration, it involves additional steps in the process. I added such things to base colors, (sometimes numerous base colors) and colored glass powders and crushed pieces of West German colored glasses. Often I would conceive of layering color upon color only to be graphically reminded of Littleton's statement about the unpredictability of the raw, fiery material. At times I would heat colored chunks on the end of a pipe to the point of flowing and wrap spiralled, horizontal bands around the form. Vertical lines or bands involve yet another application of colored additions. For every piece I worked on, while I worked, thousands of ideas and moments of potentially frozen forms in space fledted past. This, of course, is part of one's call to a particular process. I would see new ideas and resolutions that would hurriedly beckon me back to work again the next day.

CHAPTER IV

SCULPTURAL PHASES

Glass has the inherent qualities of transparency and reflection. In using these, along with the manipulation of surface treatment, form and light, I have produced work which is three-dimensional. My working process evolved in three fairly distinctive stages. As with any art form, the foundational elements or building blocks are continually referenced regardless of the distance traveled from that foundation. Just as all musical arrangements are formed by the same eight notes on a scale so too with my process. Once I established the direction in my work, I continually referred back to the constancy of what the initial form of a 'bag' with extended components taught me. These bagpipes are like the evolution of life. On the one hand, they are physically strong and stable, complete as an idea. On the other, they are so fragile, the mere threat of piles of broken glass. The material itself is the expression of my reality, an idea frozen momentarily, and released - the immediate renderings of a thought. The qualities of the glass, transparency, opacity, reflective and refractive, all remind me of our lives. The presence or absence of light and the subsequent manipulation of the light source will dramatically affect the way glass is seen. Our thoughts and actions are reflected in our environments. And, at a given moment, we may understand something one way, glance back and it has

changed. This vulnerable and transparent condition we call life is only part of a continuum on a whole experience. So too with the individual one-of-a-kind expression being a small part of a larger, more complete format.

PHASE I

In the beginning, I concerned myself with the expression of the bagpipe and its extensions into space through the use of crystal-clear glass with an emphasis on texture and attention to the shape and relationships of that form. This became my foundation for the study of multiple, clear extensions adjoined and interacting together as a whole while interrelating within the space that it occupied, Figures 5 - 8. The clarity of the pieces allowed me to research the form in space without having to deal with the many components of color and opacity. My primary concern was with utilizing transparency in a sculptural form. Surface manipulation was only limited to using clear glass texturally and controlled sandblasting. Sometimes the parts were made and attached at the hot stage, as with the bag in Figure 6. This is technically difficult and obviously renders the resulting form as permanent. I actually attached numerous forms this way and later broke them apart and reassembled them with adhesive. As I referred to earlier, this method of hot attaching limited my ability to augment and adjust the form.

The clear bagpipes reference different historical bagpipes, consequently their configuration of bag and extensions varies considerably. The wall pieces are derivative of French *musettes*, while the free standing forms were inspired by the



Figure 5. *Gaita Escape.*



Figure 6. *Highland Pipe 214*

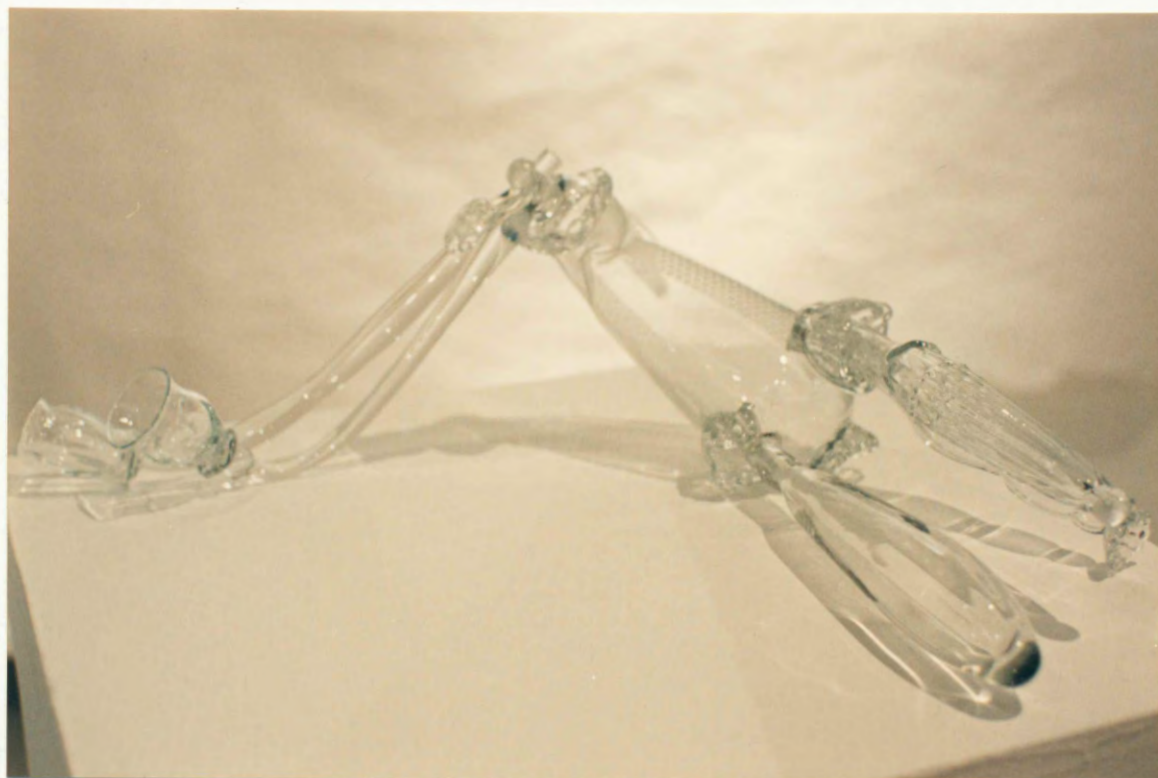


Figure 7. *Dudelsack Reclining*

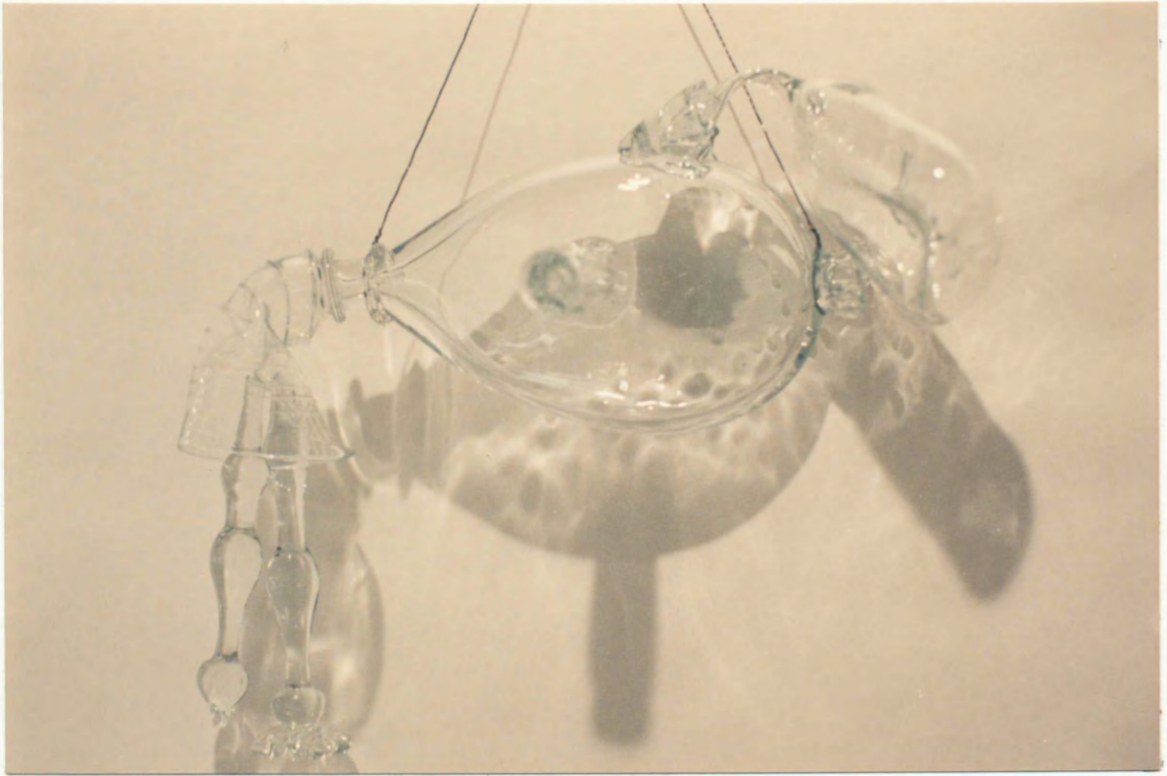


Figure 8. *Crystal Musette with Bellow*

traditional Scottish Highland bagpipes. My focus in Figures 5-8 was to introduce a voluminous organic bag, suspended and supported in space by multiple hard-edged and refined drone-elements.

The sculptural success of these pieces relies on their three-dimensional orientation and the ability to view the pieces as a transparent object, thus enabling one to see all parts at once. The important dynamic of transparent glass allows the interior spaces, that otherwise would not be seen, to be viewed as conjugal to the whole. It becomes a window, allowing light to penetrate and demanding that all parts continually interact with each other. In sculpture, the density of mass defines the edge and positive and negative space. The form ends and the space surrounding begins according to the visual edge of the mass. The most interesting discovery about these transparent pieces is that the distinct boundaries are lost in the hollow and mass because of the light penetrating the forms. The mass is not so dense, and the illusion of solid and space being comprised of equal parts, predominates.

The sandblasting was a device used to change the transparency and reflectiveness of the glass. It redefines the mass and allowed me in Figure 5, to create a cavernous space that could be seen in Figures 6 and 7, but not penetrated. In the wall piece, Figure 8, transparency is altered by the wall behind the bag itself. I manipulated the surface of this piece to allow light to penetrate through it, thus casting textural shadows on the surface of the wall and providing a way for the wall and the piece to be interactive and necessary to each other.

PHASE II

In the second stage of my work I incorporated the use of some colored glass and abstracted and simplified the process by utilizing single-volume forms. These pieces were most often constructed of an organic bag-like component with a single large drone which extended off the bag. I had two objectives. The first was to connect these pieces in the hot stage, and to provide an expeditious format whereby I could begin to study the addition of color. My other objective was to combine two or more of these 'units' into sculptural configurations that would be interactive as groups. Figures 9-13 exemplify these combinations.

My immediate problem became how to reconcile color with form, when form tends to be primarily based on the relationships between shapes. I tried to achieve a visual cohesion by utilizing a color that breaks into a varied spectrum, i.e., from opaque green-brown to a very transparent golden hue when directly lit (Figures 9 and 10). I continued to use clear glass as a vehicle of contrast within these forms. I tried to draw attention away from the extremities and allow the color to wash across the pieces, creating a unity of the mass. In Figure 13 the viewer's eye is drawn across the piece because of similar coloration amid the individual components. The color was to be allowed to organize the three-dimensional space in equal terms with the more organic forms. It seemed important to use more anonymous shapes to accomplish this. My concern allowed the new introduction of color, opacity, reflection and refraction of light to inform and intercollate the once clear surface and cavity.



Figure 9. *Zampogna*



Figure 10. *Frozen Moment*

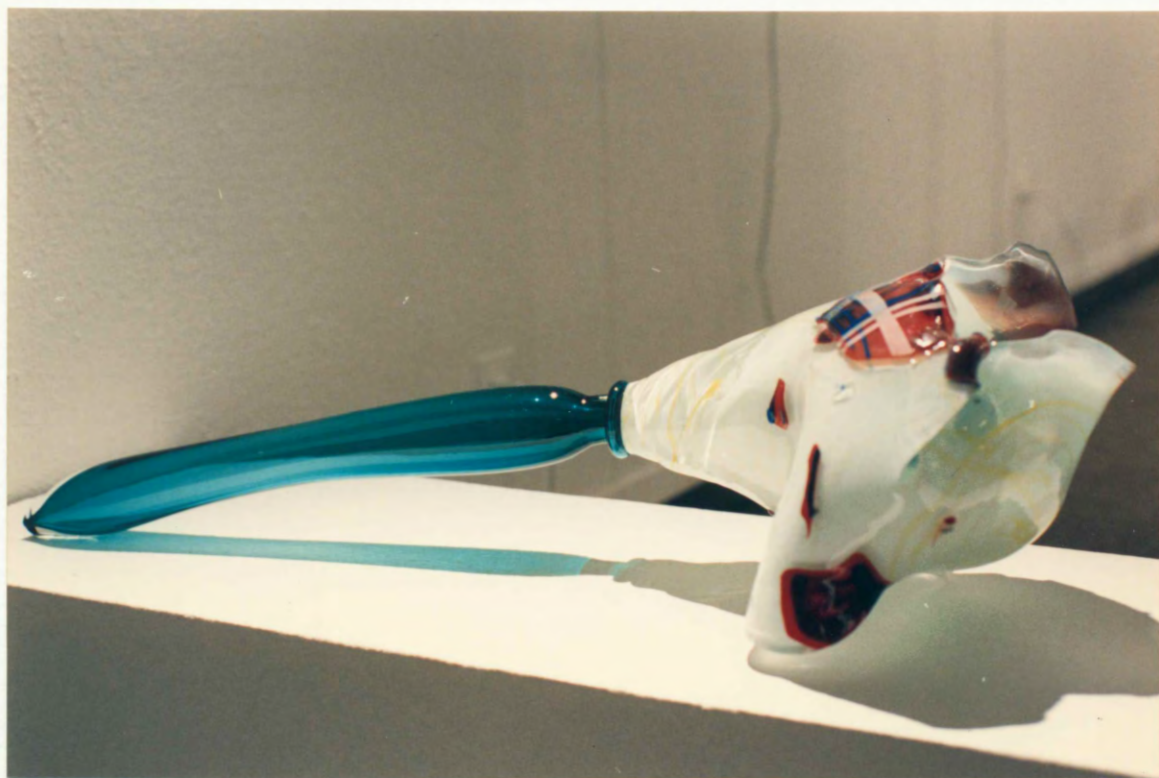


Figure 11. *Cavitated Emerald*



Figure 12. *Bagpipe Extended*



Figure 13. *Contemporary Ensemble*

I continued to experiment with the combination of more abstracted shapes while introducing colors which were not particularly identifiable as bagpipe colors.

This use of abstract, amoebic forms in union together with less comprehensible color in terms of identification with historical bagpipes seemed to make these pieces more about mass and space relationships without being easily categorized in terms of the subject matter. I continued to investigate the spatial relationships of multiple extensions which were derivative of the historical bagpipe. This meant adjoining components to the bag once again in fulfillment of a need to alter forms, now with the addition of colors and colored texture. Figures 14 and 15 became transitional pieces which bridged my work between phases II and III.

PHASE III

The colored pieces of Phase II helped to bring me to this stage. As the clear pieces had helped serve as the vehicle to study relationships of parts to each other and the effects of transparency, the Phase II colored pieces helped me to realize that the color needed to appear to be one and the same with the whole form itself. I wanted to imply a contrast between the drones and the bag through the opacity and transparency of the colors. As well, I had realized all along how rich and embellished the texture is on actual bagpipes. The surface, color and textural application seemed to go together.



Figure 14. *Bumble Bee Bag*



Figure 15. *Aegean Dudy*

I realized that I had previously used color only as an encasement inside of clear glass. This appeared as a sandwich of color, cased inside the bag and drone with a layer of clear overlaying. I wanted to describe and interpret textures such as animal fur and intricate designs that might have been carved ivory or exotic woods of the drones. I wanted to invent heavily embroidered and patterned silks and velvets and compose a plaid-woven material. I realized that color and texture both had emotional and physical qualities that could be felt. They could be mutually supportive. Color and texture could inspire an emotional response and open the work to a multiplicity of interpretations. Exactly what that state of response would be, would vary with the viewer, but a mood could be conveyed.

Most bagpipes are made from the body cavity of a goat or sheep and the drone, chanter, mouth-piece, and bellow attachments all adjoin where the legs of the animal had been. Depending on the culture, the use of any particular bagpipe would determine how it was embellished. For example, the Italian *zampogna*, is extremely plain by comparison to a high court French lady's bagpipe of the 15th century called a *cornemuse*. The purpose and audience for each bagpipe was extremely different and necessitated varying materials. This fascinated me and helped me to concretize and translate my ideas into specific textural patterns using the glass.

The final phase then became one of layer upon layer of different glass elements and usage of the fire and tools. Each piece has its own color, texture and gesture while remaining a lyrical abstraction of a historical bagpipe. My intention was not to reconstruct a particular bagpipe, rather to use my imagination and the inherent qualities of the instrument as the groundwork for abstraction. My sole reference for these has been black and white photographic images, (with the exception of the Highland pipe). The color combinations, altered surfaces and gesture have all been combined to form an emotional response to this notion of 'dudelsacks'.

In this phase, I have included eight pieces, Figures 16 through 23. I have chosen to write about Figures 16-19 as a single concept because they are all basically the derivative of a Highland plaid bagpipe. Even though their final form as sculpture varies, the working concept was similar for all four. Figure 20 is that of a French *musette* and Figure 21 from the Bohemian *dudy*, (*dudelsack*). Figures 22 and 23 are abstracted forms of musettes, in which I wanted to investigate both the application of color and texture as wall pieces.

Structurally, Figures 16-19 are folded bags with attached drones and chanters extending into space well beyond the confines of the bag. The process I went through to create the surface was multifaceted. The bag of Figure 19 was made by forming a layer of blue glass and in a very specific way forming dense green horizontal and vertical lines. This bubble was then cut off the blow pipe and cooled over night. I then masked off the six inch bubble to emphasize and form a grid of the green lines. This was deeply sandblasted and later returned to



Figure 16. *Royal Tartan with Pink Frill*



Figure 17. Untitled

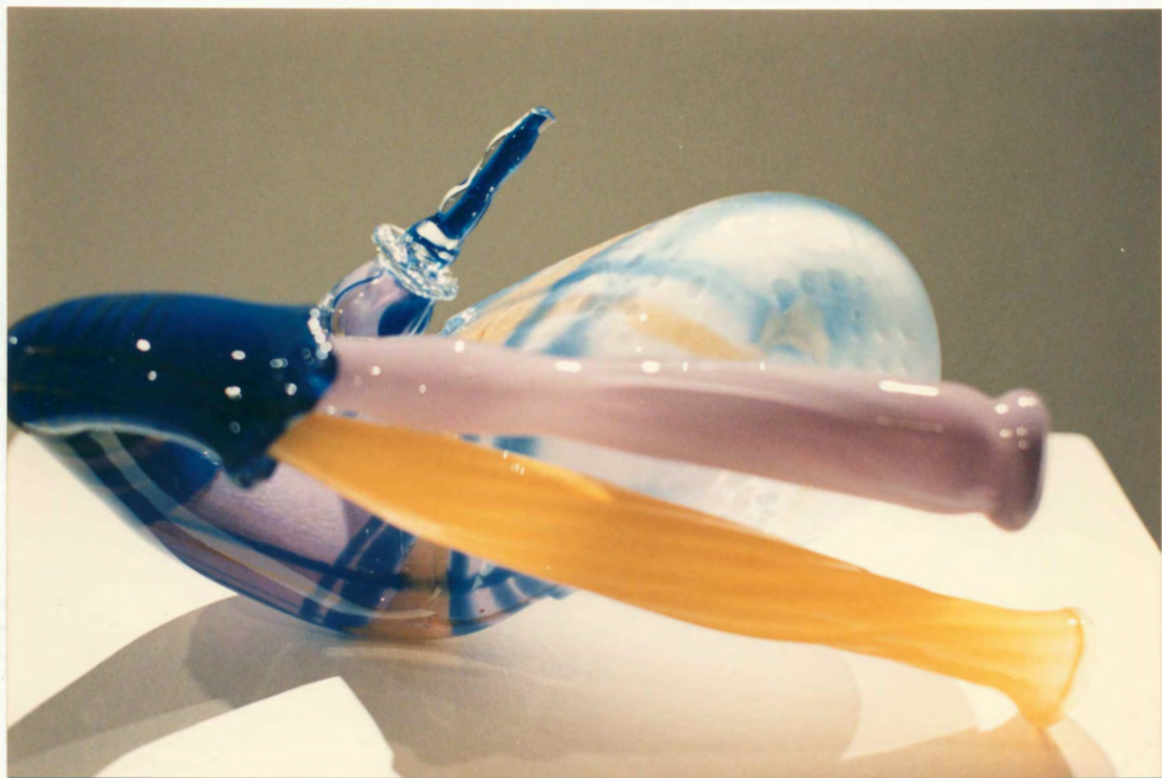


Figure 18. *Implied Tartan*



Figure 19. *Gaal Tartan*



Figure 20. *French Musette*



Figure 21. *Bohemian Dudy*



Figure 22. *Cornemuse*



Figure 23. *Amarillo Fling*

the cooling oven and slowly brought up to a temperature that would allow me to pick it up once again on the end of my pipe. From this point I proceeded to add clear glass to it and expand the form. In the process, the green lines turned transparent yellow and the cobalt blue began to show evidence of some purple glass in combination with it. Of course, none of this is visible in a true color sense while hot. I anticipated both of these color deviations prior to their change. However, part of the excitement about glass is that in layering, particularly, one does not know what the final outcome will be. To this end, I made extensions combining purple and blue glasses and covering them with colored powders and wraps of other colors. I did this in part to contrast the opaque, linear drone forms with the billowy transparency of the bag.

I included this description to emphasize the complexity of the process particularly in regards to the pieces of this final phase. For every color used, especially in a grid format, it is comparable to the printing process. Each color must be prepared and separately applied. The fact that the material is continuously molten and in a state of flux is optimally challenging.

My goal with Figures 16, 17 and 18, as well as with Figure 19 was to use coloration as a reference to the plaids of historical bagpipes. The geometrically extended drones were meant to pose a dynamic spatial contrast to the voluminous bags. With Figures 16 and 19, I had initially hoped to extend extraneous 'glass-material' from the long extensions in the form of fringe and

possibly ribbons as I have seen traditionally used. However, neither effect seemed to strengthen the pieces, so I discarded the concept.

Unlike the hollow, transparent mass of Figures 6 and 7, Figures 16, 17, and 18 became solid, opaque masses with visually precise edges defining the space beyond and contained by the form. The color is now meaningful both as an interpretation of fabric and in context to a whole idea composed of multiple parts. The surface undulates and folds, lines dissolve and reappear to form a new spatial relationship beyond the passage of light. The eye is moved not only by the shape and its relationship to the whole but propelled by the embellishment of the surface color. The strength is in the sense of volume and occupied space without the co-dependence of light, as a defining element for the sculpture.

In Figures 20 and 21, I have purposely returned to the question of light modulation through the use of both colored and transparent glasses. They belong in this phase because I especially tried to emphasize the surface and textural quality of these pieces. Figure 20 relies on the translation of light penetrating through the form to emphasize and enhance the volume of the piece. This piece is heavily ornamented, as I imagined a musette to be. This was a precious instrument of the day, played by high-society women of the 16th century. I have tried to create surface pattern and a simple elegance about the form that might suggest this. My intention was to create a sense of movement while exploring the possibilities of allowing the character of the material to be defined by the fluid and graceful ornamentation of the surface.

With Figure 21, I purposefully tried to create a layered skin of color that would suggest animal fur or hair, the covering of choice for these *dudys*. The inclusion of a goat's head helps to imply that the whole concept is dependent on a fictitious or actual animal. Few people realize that bag pipes are often made from an actual goat or sheep. My manipulation and interaction with this piece should be sufficiently evident to the viewer. The player of this bagpipe would have to physically envelop himself with this instrument. I, too, had to physically manipulate and resolve each part of this, as well as all of my pieces. Because of the refined edges and articulated precision of this piece, it is perhaps more apparent. I find this satisfying, as it directly relates to my quest for meaning in this work. It speaks of the integration that must transpire between oneself and the material. This piece has front and a back. However, in casting a beam of artificial light through the back side of the piece, an entirely opaque surface becomes three-dimensionally animated and transposed by the illumination. With the goat's head on top of this illuminated enclosure, it becomes hauntingly macabre. The prismatic eyes on the head of the goat become a focal point. The red color of this piece and the thrust of light elicits an emotive response from the viewer. My choice of colors was not particularly intended to depict a historical dudelsack. In retrospect, the choice of color was the culmination of my emotions and energy about this piece. It encapsulates the essence of my feelings.

CHAPTER V

CONCLUSIONS

Through this thesis work, I have come to understand more about the inherent qualities of glass. First, it is a malleable, flowing, and responsive material, only moments later to become rigid, frozen and brittle. Its properties are that of transparency and opacity, colored and clear, shiny and dull, textured and smooth, formed and unformed. All in all, an enigma of contradiction. Through the properties of this contradictory and changing material, I have been free to interpret a form through my imagination - the dudelsack.

In this supportive statement to my thesis show, I have outlined my influences; historical, in reference to the bagpipe itself, and individual, in reference to other glass artists. The inclusion of a brief outline regarding the technical process was a necessity because many complex glassworking techniques were employed in the work. As important as they are to the final forms, the techniques played a subsidiary role to the conceptual concerns of the work. When needed, the technical processes served to help me express my feelings about the subject matter.

The final portion of this statement dealt with an analysis and explanation of my work. I was able to utilize the process of blowing molten glass to produce

abstracted sculptural forms that inherently allowed the material to retain its memory of having once been viscous. My choice of forms varied from that of a nomadic, peasant-style bagpipe to the elegant, refined bagpipe of royal court society. I created pieces that ranged from those which relied solely on the optical and textural qualities of clear glass to opacified, heavily colored textural glass applied both to the surface and encased within a shell of transparent glass.

I have found that the essence of my work is the questions and the inquiry itself. Challenging my own sensibilities through the vehicle of aesthetic inquiry, continues to promote and provoke growth and exploration. Perhaps my own probing can ultimately expand the perceptions and emotions of the viewer.

ENDNOTES

1. S. Marcuse, *Musical Instruments*, (Garden City, N.Y.: Doubleday & Co., Inc., 1964), page 31.
2. H. K. Littleton, *Glassblowing, A Search for Form*, (New York: Van Nostrand Reinhold Co., 1971), page 133.
3. H. K. Littleton, *Ibid*, page 17.

SELECTED BIBLIOGRAPHY

- Baines, Anthony, *European and American Musical Instruments*. New York: Viking Press, 1966.
- Byrd, Joan Falconer, "Dreisbach," *New York*, (Spr. 1988), Pages 8-13.
- , *Harvey K. Littleton: A Retrospective Exhibition*. (CATA.). Atlanta, Georgia: High Museum of Art, 1984.
- Chihuly, Dale, *Chihuly: Color, Glass and Form*. New York: Kodansha International, Ltd., 1986.
- Firestone, Evan, "Painting with Glass...A Place in History," *The Arts Journal*, (May, 1981), Pages 2-5.
- Littleton, Harvey K., *Glassblowing, A Search for Form*. New York: Van Nostrand Reinhold, Co., 1971.
- Marcuse, Sibyl, *Musical Instruments*. Garden City, New York: Doubleday & Co., Inc., 1964. Pages 30-31.
- Midgley, Ruth, ed., *Musical Instruments of the World*. New York: Facts on File, Inc., 1976. Pages 14, 54-57, 269-271.
- Sadie, Stanley, ed., *The New Grove Dictionary of Musical Instruments*. London: MacMillan Press, Ltd., 1984. Pages 98-110.
- Smith, Paul J., *Craft today: Poetry of the Physical*. (CATA.). New York: Weidenfeld & Nicholson, 1986.
- Wagner, David J., ed., *Americans in Glass*. (CATA.). Wausau, Wisconsin: The Leigh Yawkey Woodson Art Museum, 1984.